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AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application Number 10/004,839

REMARKS

Claim 8 is added, hence, claims 1-8 are all the claims pending in the application.

The Examiner requires the drawings to be changed to show the display and user interface described in the specification. Applicant submits herewith a proposed drawing change to Figs. 1 and 2, and respectfully requests the Examiner to approve the proposed drawing changes. The specification is amended to refer to the drawing changes.

The Examiner objects to claims 1, 2 and 7 because of some informalities. Those claims are amended as required. It is respectfully submitted that the claim amendments do not narrow the scope of the claims and are not required for patentability.

Claims 1-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over PCT Publication No. WO 00/4960 to Ascom Hasler Mailing Systems, Inc. ("Ascom") in view of Woolston. Applicant respectfully traverses the rejection for at least the following reasons.

Claim 1, for example, is directed to a label tape dispenser for a franking machine. The dispenser has a delivery roller on which is wound a continuous tape of labels and a drive means that conveys this tape along a dispenser conveying path from the delivery roller towards a label inlet of the franking machine. The label tape dispenser include two coding means. The first coding means is mounted on the drive means and measures an angular displacement of the drive means. The second coding means is mounted on the delivery roller and measures an angular displacement of the delivery roller. A processing means calculates, from the angular displacement measurements made by both the first and second coding means, a remaining length of the continuous tape of labels.

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Ascom is relied for disclosing a conventional tape dispenser, which includes only a single coding means. Ascom discloses, in Fig. 2 and at pages 4-5, a drive shaft 62 that rotates a drive wheel that causes a tape 70, passed through a nip created between the drive wheel and a idler wheel attached to the idler shaft 64, to be dispensed from the tape dispenser. An encoder wheel 80 is mounted on the drive wheel shaft 62. An optical sensor, in cooperation with the encoder wheel, detects the number of rotations of the drive wheel and outputs a signal indicating the number of rotations of the drive wheel that represents the length of tape dispensed. Ascom indicates that the tape can slip against the drive wheel, and hence, the signal does not accurately represent the length of tape dispensed. To solve that problem Ascom, as shown in Fig. 3, moves the encoder wheel 80' to the idler wheel shaft 64' instead of the drive wheel shaft 62'.

Ascom, as admitted in the Office Action at page 3, discloses using only one encoder wheel, whether it is mounted on the drive shaft or the idler shaft. In the Office Action it is also admitted that Ascom fails to teach a processing means that calculates a remaining length of continuous tape. Woolston is relied upon for disclosing calculating a remaining length of a web material wound on a roll.

In rejecting the claims neither reference is asserted to teach using more than one encoder. Rather, it is merely asserted that it would have been obvious to use two coding means at the same time in order to provide more detailed information for determining the status of the tape. However, neither Ascom nor Woolston teach or suggest the need for more detailed information. Neither reference suggests how providing two encoding wheels would provide more detailed information. Accordingly, because the prior art, either alone or in combination, neither teaches

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nor suggests using a first coding means mounted on a drive means and a second coding means mounted on a delivery roller, claim 1 is not rendered unpatentable.

Claim 7 requires a first means for measuring a displacement of a drive means and a second means for measuring a displacement of a delivery roller, and determining a remaining length of tape from the first and second displacement measurement means. Since neither Ascom nor Woolston teaches or suggests using both a first and second means for measuring displacements, it is respectfully submitted that claim 7 is not rendered unpatentable.

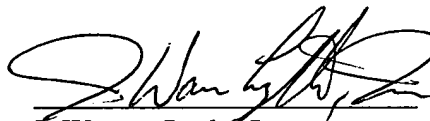
New claim 8 is added. It is directed to the remaining length of tape, determined by the processing means, corresponding to a ratio of angular displacements measured by the first and second coding means. This claim is supported at least at page 4, lines 2-20 of the specification. It is respectfully submitted that the prior art neither teaches nor suggests determining a remaining length of tape based on a ratio of angular displacements measured from two coding devices.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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PATENT TRADEMARK OFFICE

Date: February 24, 2003

APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

On page 3, change the 5th paragraph as follows:

This dispenser comprises a delivery roller 10 on which is wound a continuous tape 12 of labels to be cut out (or even pre-cut out), at least two pairs 14, 16 of drive rollers for conveying this tape along a dispenser conveying path from this delivery roller towards a label inlet of the franking machine 50 [(not shown)], and a cutting module 18 placed on this conveying path, advantageously between the two pairs of drive rollers, and intended, under the control of processing means 20 (advantageously a microprocessor computing module), to define a given length for the label to be cut out. The drive rollers which ensure unwinding of the label tape are actuated by a control motor 22 through kinematics 24 incorporating gears, pulleys and belts, likewise actuated under the control of the processing means. Speed and position sensors (not shown) are also provided to allow the cut out of the tape to be precisely monitored. All these elements are mounted in a body or casing of the dispenser 26.

On page 4, change the 2nd paragraph as follows:

In this way, by making the ratio of the number of pips of the two coding means $X/Y = (d/L1)/(d/(R*L2)) = R (L1/L2)$, a direct representation is obtained of the radius of the delivery roller and therefore of the remaining length of the continuous tape of labels. In particular, if the steps of unitary displacement of the two coding means are chosen to be identical, then $X/Y = R$.

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The display of different thresholds, for example 100% of R, 75%, 50%, 25% and 0% (noted by the absence of pip on the second coding means) will make it possible to judge more simply the length of tape remaining. Such display will preferably be effected on a user interface 52 of the franking means 50 via the processing means 20 of the dispenser. However, it may be envisaged to effect this display directly at the level of the label dispenser on a display 40 especially intended for this function.

IN THE CLAIMS:

Claims 1, 2 and 7 are amended as follows:

1. (Amended) Label tape dispenser for a franking machine, comprising a delivery roller on which is wound a continuous tape of labels, a drive means for conveying this tape along a dispenser conveying path from said delivery roller towards a label inlet of the franking machine, [wherein it further comprises, on the one hand, mounted on said drive means,] a first coding means mounted on said drive means, for measuring an angular displacement of said drive means[and, on the other hand, mounted on said delivery roller], a second coding means mounted on said delivery roller, for measuring an angular displacement of said delivery roller, and processing means [are provided] for calculating, from said measurements of angular displacement, a remaining length of said continuous tape of labels.

2. (Amended) The tape dispenser of Claim 1, wherein said processing means comprises means for calculating and controlling [the] a display of different thresholds corresponding respectively to 100%, 75%, 50%, 25% and 0% of said remaining length of tape.

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7. (Amended) Label tape dispenser for a franking machine comprising a delivery roller on which a continuous tape of labels is wound, [and a] drive means for conveying said tape along a dispenser conveying path from said delivery roller towards a label inlet of the franking machine,

[wherein it further comprises] first means for measuring a displacement of said drive means, second means for measuring a displacement of said delivery roller and processing means for determining a remaining length of said continuous tape of labels from said first and second displacement measuring means.

New claim 8, set forth below, is added:

--8. (New) The tape dispenser of Claim 1, wherein said remaining length of the continuous tape of labels corresponds to a ratio of said angular displacements measured by the first and second coding means.--